Service Manual

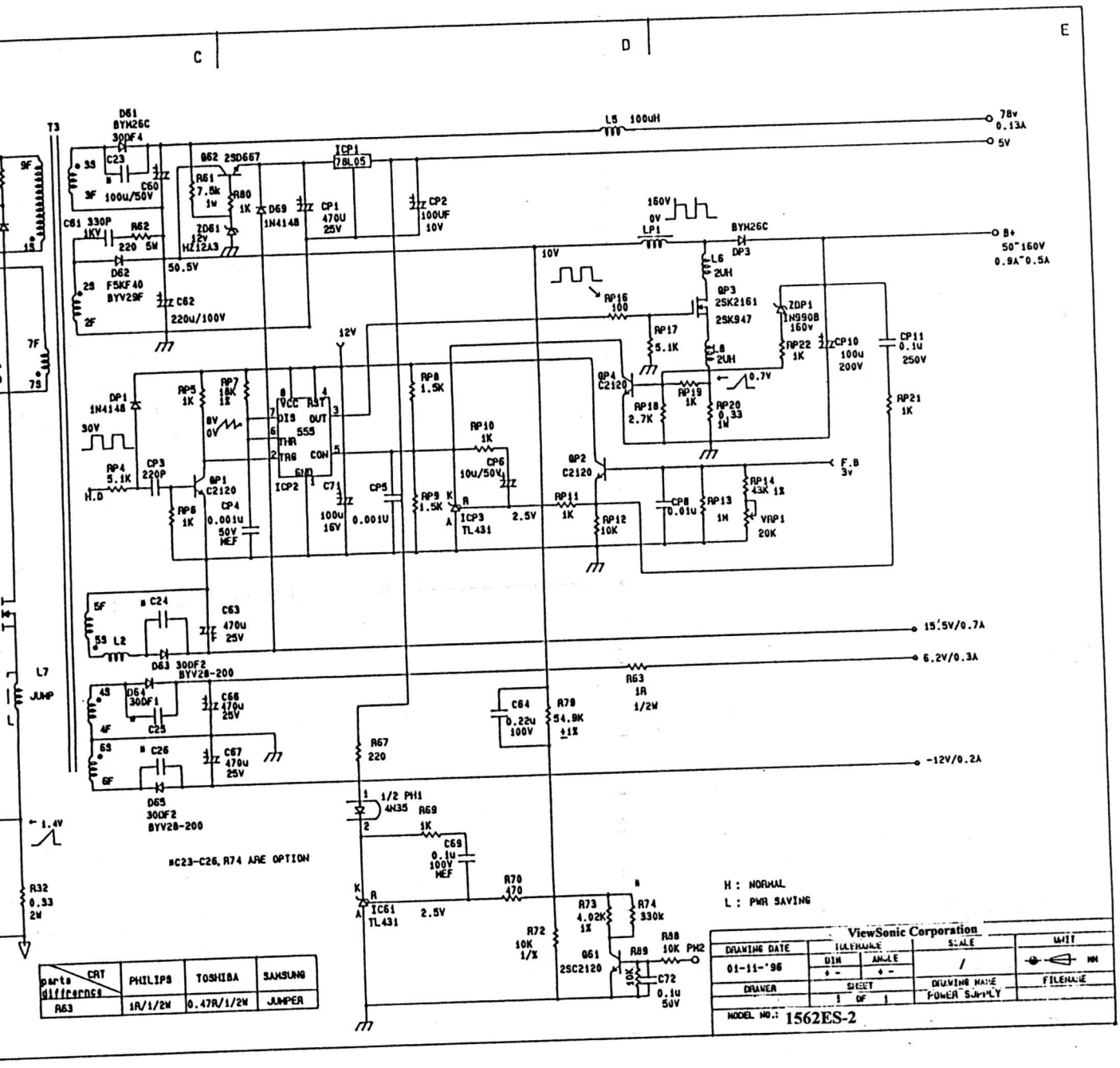
ViewSonic 15ES-2

Model No. 1562ES-2

15" Analog Controlled Color Monitor
Entré Series

(Rev. 1 - July 1996)

ViewSonic® 20480 E. Business Parkway, Walnut, California 91789 USA - (800) 888-8583



parts differences / CRT	PHILIPS	TOSHIBA	SAMSUNG
R63	1R/1/2W	0.47R/1/2W	JUMPER

DATE	ECN/ECO NO.
10-13-'95	N-10029501EG
11-09-'95	N-09299501EG
12-01-'95	O-11159501EQ
12-06-'95	N-11179504EG
12-06-'95	N-11179503EG
12-26-'95	N-11239052PE
12-26-'95	N-11229501PE
01-11-'96	N-12119501PE
01-11-'96	N-12129501PE
01-23-'95	N-01039601RG
02-01-'96	N-01159604EG
02-29-'96	N-01319603PE
03-21-'96	N-02229601PE
03-21-'96	N-02229602PE
04-09-'96	O-013096C1EP
04-09-'96	N-02079601PE

16 15 14

H G F E D

MODE CONTROLLER PCB

3k R109

C105 220u/10v

3.8vpp

C103 39P 50V

XT101 3.58 MHZ

R103 10M

C104 39P 50V

IC101 WT8045

R108 3k

TO P101

CLP1

H

GND

V

R101 JUMP

R102 JUMP

TP101

R105 1K

R110 10K

R145 3.6K

R111 2K

C201 1U/50V

TP102

R104 1K

R112 10K

1 2 3 4 5 6 7 8 9 10 11 12 13 14

H-IN V-IN H-OUT V-OUT F45K F36K F33K QV CV/RV VSS F52K PM1

28 27 26 25 24 23 22 21 20 19 18 17 16 15

57K 48KB 35K (I) 48KA 37K 35K 480 400 350 QH CH/RH PM3 PM2

5.2 vpp

VR102 20K (CERMET)

C109 100P 50V (NP0)

R107 56.2K 1%

R113 2K

D101 1N4148

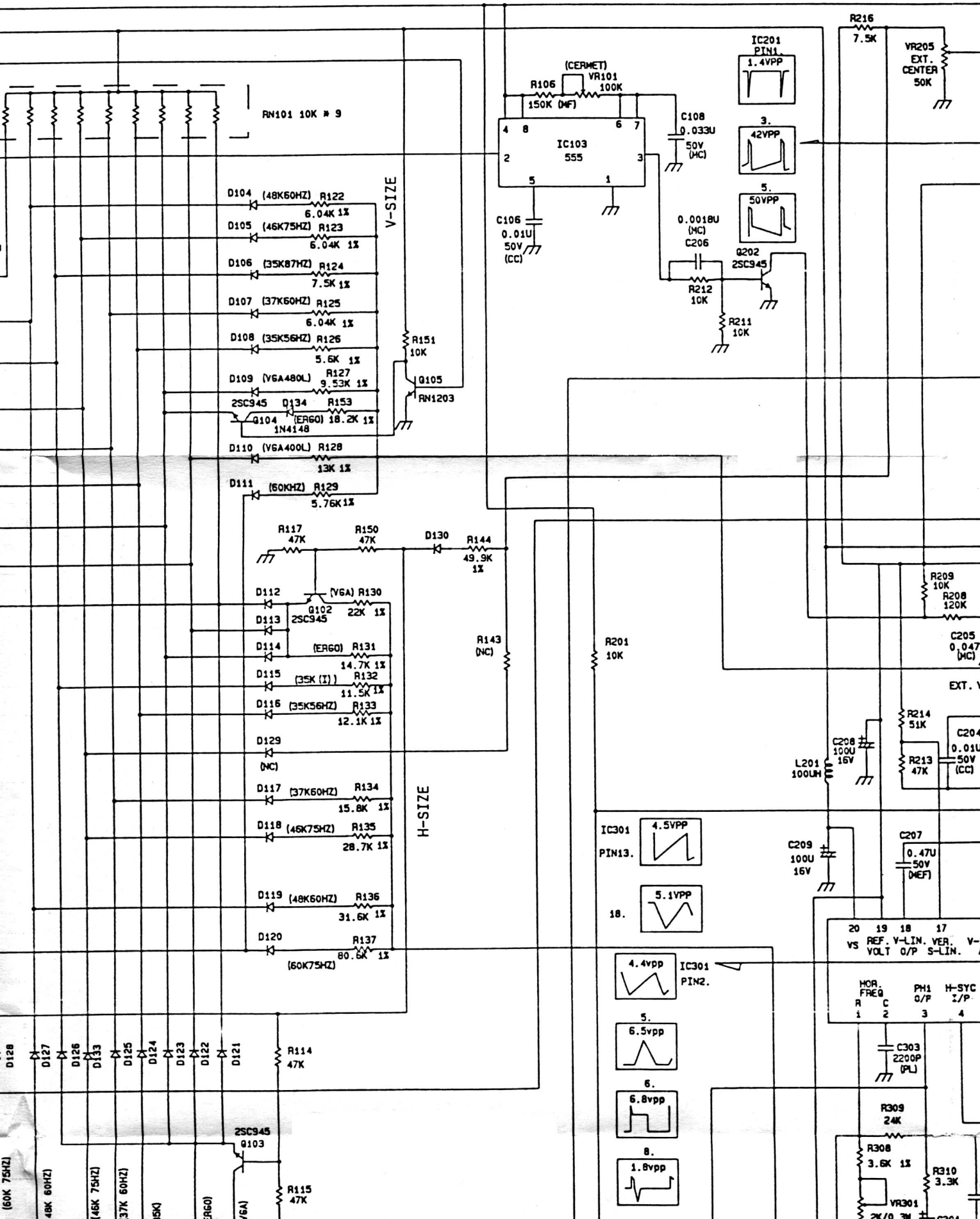
Q101 RN1203

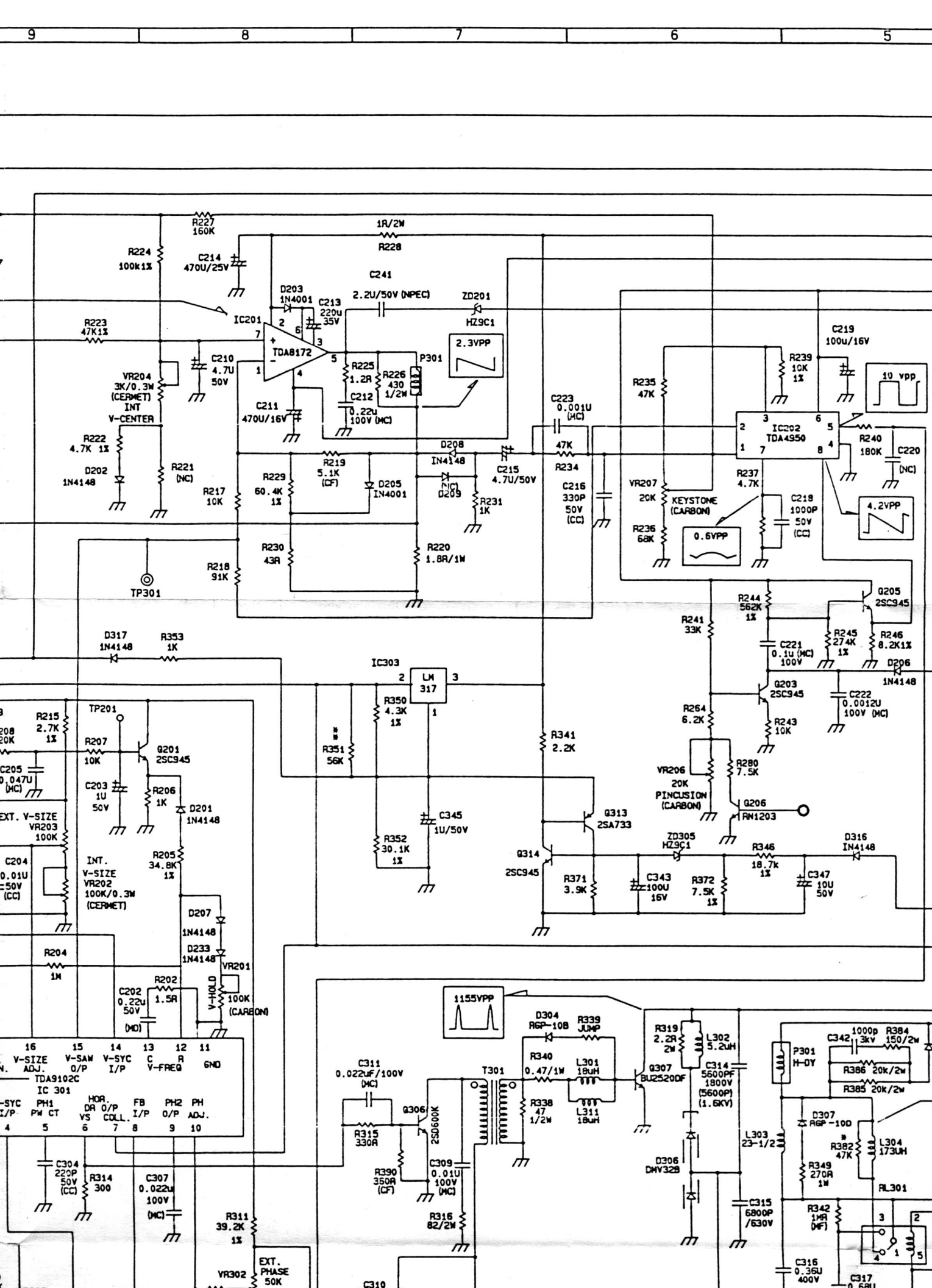
D128

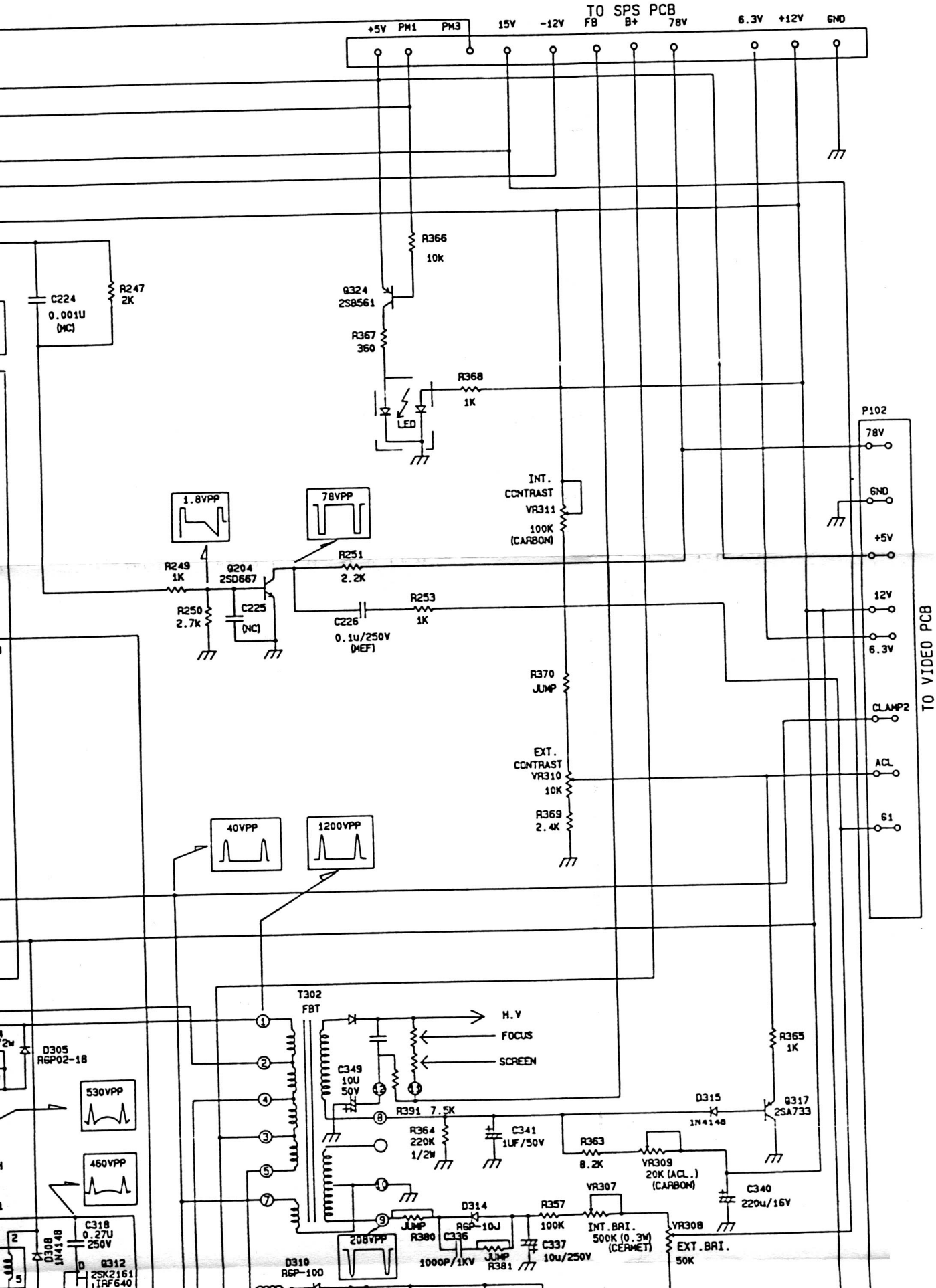
75HZ

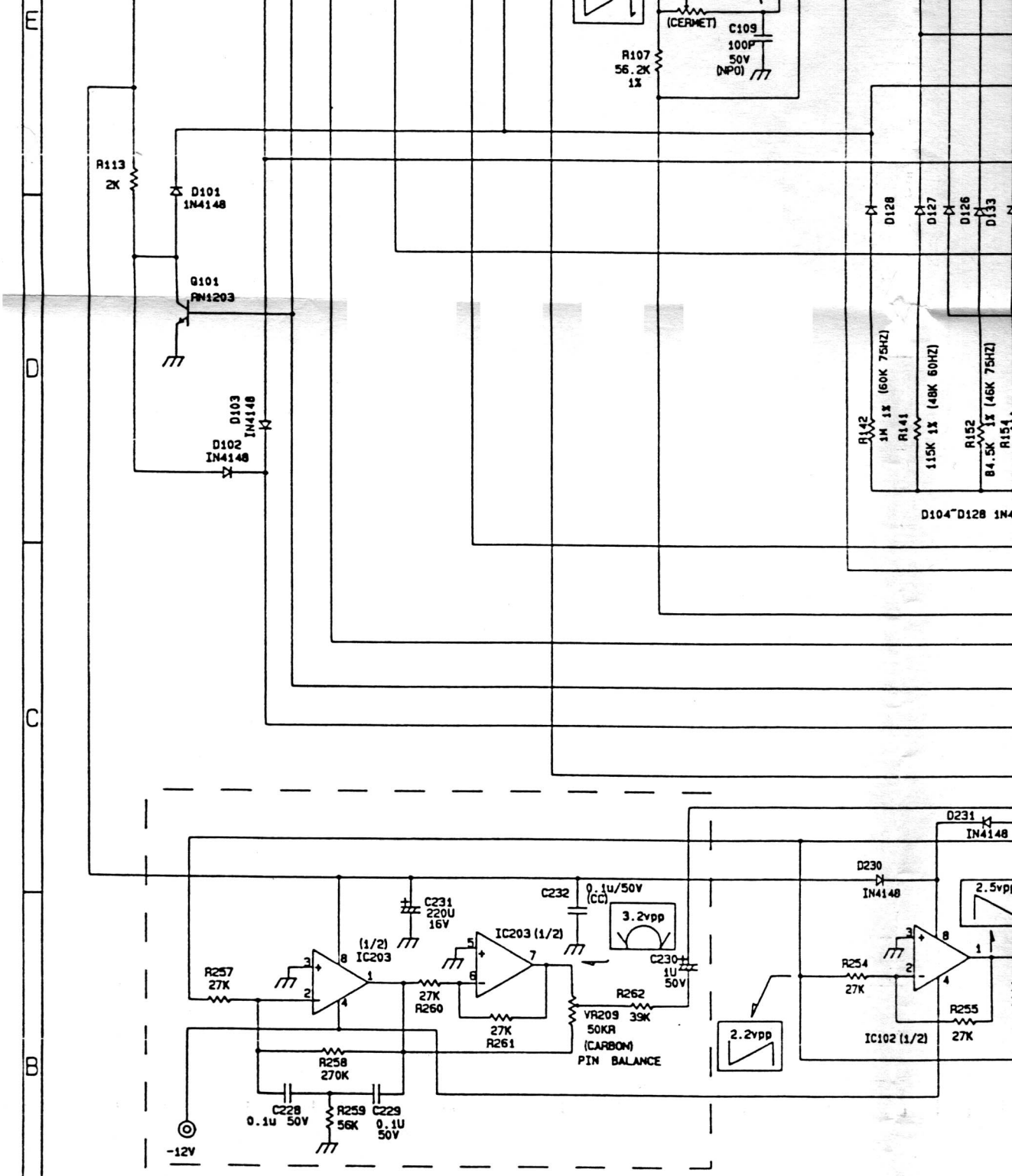
MAIN DEF. PCB

4141109803



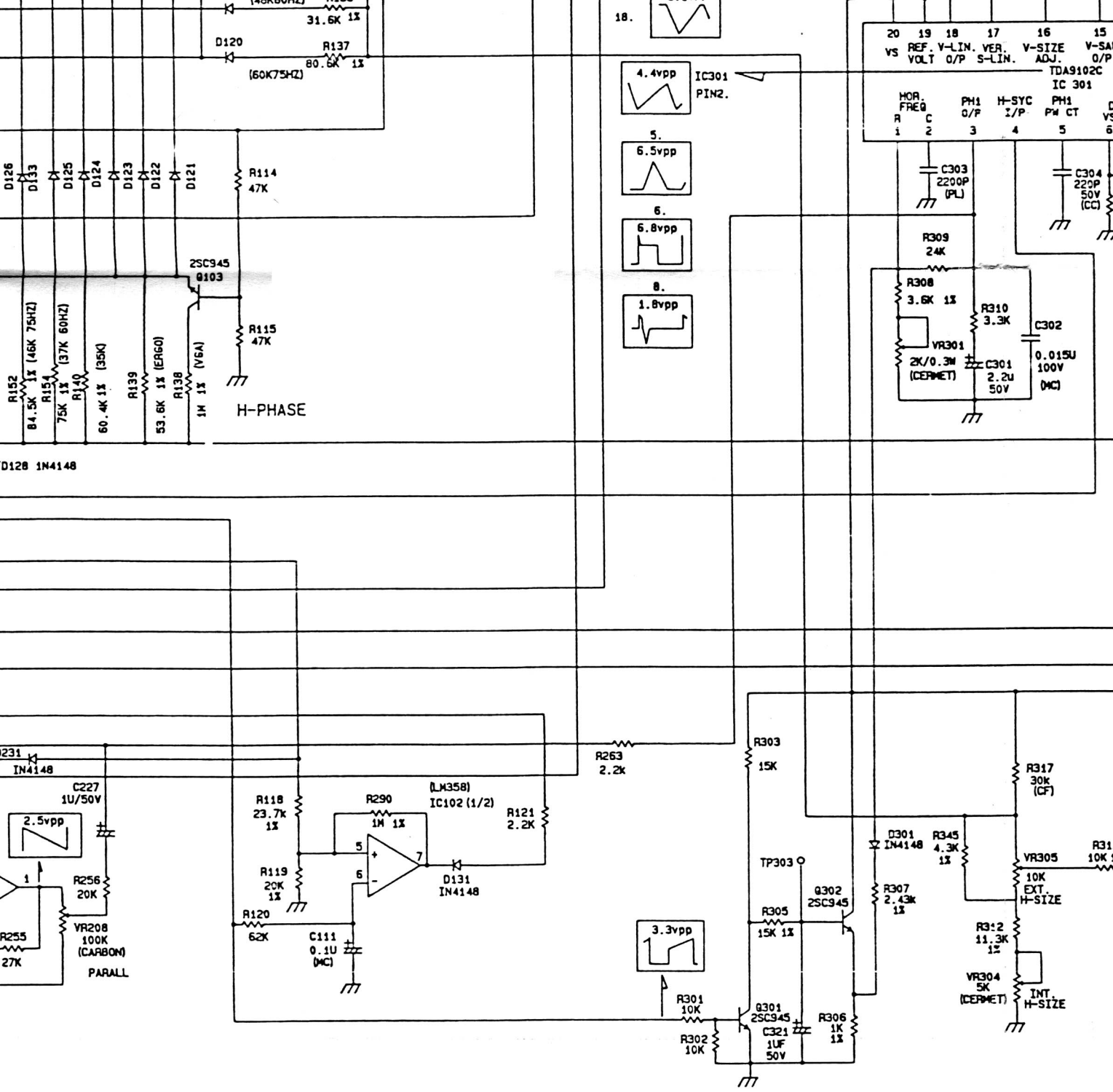

9
8
7
6
5
R227 160K
1R/2W
R228
R224 100k1%
C214 470U/25V
C241
2.2U/50V (NPEC)
D203 1N4001
C213 220u 35V
ZD201 HZ9C1
IC201
TDA8172
R223 47K1%
C210 4.7U 50V
VR204 3K/0.3W (CERMET) INT V-CENTER
R222 4.7K 1%
D202 1N4148
R221 (NC)
C211 470U/16V
R225 1.2R
R226 430 1/2W
P301
C212 0.22u 100V (MC)
2.3VPP
C219 100u/16V
R239 10K 1%
10 vpp
R235 47K
C223 0.001U (MC)
IC202 TDA4950
R240 180K
C220 (NC)
D208 IN4148
R219 5.1K (CF)
C215 4.7U/50V
47K
R234
R237 4.7K
VR207 20K KEYSTONE (CARBON)
C218 1000P 50V (CC)
4.2VPP
R236 68K
0.6VPP
R229 60.4K 1%
D205 IN4001
D209 (NC)
R231 1K
R217 10K
C216 330P 50V (CC)
R230 43R
R220 1.8R/1W
R218 91K
TP301
D317 1N4148
R353 1K
IC303
LM 317
R350 4.3K 1%
R351 56K
R341 2.2K
R244 562K 1%
Q205 2SC945
R241 33K
C221 0.1u (MC) 100V
R245 274K 1%
R246 8.2K1%
D206 1N4148
Q203 2SC945
C222 0.0012U 100V (MC)
R264 6.2K
R243 10K
VR206 20K PINCUSION (CARBON)
R280 7.5K
Q206 AN1203
Q313 2SA733
C345 1U/50V
R352 30.1K 1%
Q314 2SC945
ZD305 HZ9C1
R346 18.7k 1%
D316 IN4148
R371 3.9K
C343 100U 16V
R372 7.5K 1%
C347 10U 50V
TP201
R215 2.7K 1%
R207 10K
Q201 2SC945
C205 0.047U (MC)
C203 1U 50V
R206 1K
D201 1N4148
EXT. V-SIZE VR203 100K
R205 34.8K 1%
INT. V-SIZE VR202 100K/0.3W (CERMET)
C204 0.01U =50V (CC)
D207 1N4148
D233 1N4148
R204 1M
VR201
R202 1.5R
C202 0.22u 50V (MD)
V-HOLD
100K (CARBON)
16 V-SIZE ADJ.
15 V-SAW O/P
14 V-SYC I/P
13 C V-FREQ
12 R
11 GND
TDA9102C
IC 301
-SYC I/P
PH1 PW CT
HOR. DR O/P VS
FB I/P COLL.
PH2 O/P
PH ADJ.
4 5 6 7 8 9 10
C304 220P 50V (CC)
R314 300
C307 0.022u 100V (MC)
R311 39.2K 1%
VR302 EXT. PHASE 50K
1155VPP
D304 RGP-10B
R339 JUMP
C311 0.022uF/100V (MC)
T301
R340 0.47/1W
L301 18uH
R319 2.2R 2W
L302 5.2uH
Q307 BU2520DF
C314 5600PF 1800V (5600P) (1.6KV)
P301 H-OY
C342 1000p 3kv
R384 150/2W
R386 20k/2W
R385 20k/2W
Q306 2SD600K
R338 47 1/2W
L311 18uH
R315 330R
R390 350R (CF)
C309 0.01U 100V (MC)
R316 82/2W
D306 DMV32B
D307 RGP-10D
L303 23-1/2
R382 47K
L304 173UH
R349 270R 1W
RL301
C315 6800P /630V
R342 1MR (MF)
C316 0.36U 400V
C317 0.68U
C319


TO SPS PCB
+5V
PM1
PM3
15V
-12V
FB
B+
78V
6.3V
+12V
GND
R366
10k
Q324
2SB561
R367
360
R368
1K
LED
C224
0.001U
(MC)
R247
2K
P102
78V
GND
+5V
12V
6.3V
CLAMP2
ACL
G1
TO VIDEO PCB
INT.
CONTRAST
VR311
100K
(CARBON)
1.8VPP
78VPP
R249
1K
Q204
2SD667
R251
2.2K
R250
2.7k
C225
(NC)
R253
1K
C226
0.1u/250V
(MEF)
R370
JUMP
EXT.
CONTRAST
VR310
10K
R369
2.4K
40VPP
1200VPP
T302
FBT
H.V
FOCUS
SCREEN
D305
RGP02-18
530VPP
460VPP
C349
10U
50V
R391 7.5K
R364
220K
1/2W
C341
1UF/50V
D315
1N4148
Q317
2SA733
R365
1K
R363
8.2K
VR309
20K (ACL.)
(CARBON)
C340
220u/16V
VR307
C318
0.27U
250V
D308
1N4148
Q312
2SK2161
IRF640
D314
RGP-10J
R357
100K
INT.BRI.
500K (0.3W)
(CERMET)
VR308
EXT.BRI.
50K
JUMP
R380
C336
1000P/1KV
JUMP
R381
C337
10u/250V
208VPP
D310
RGP-100

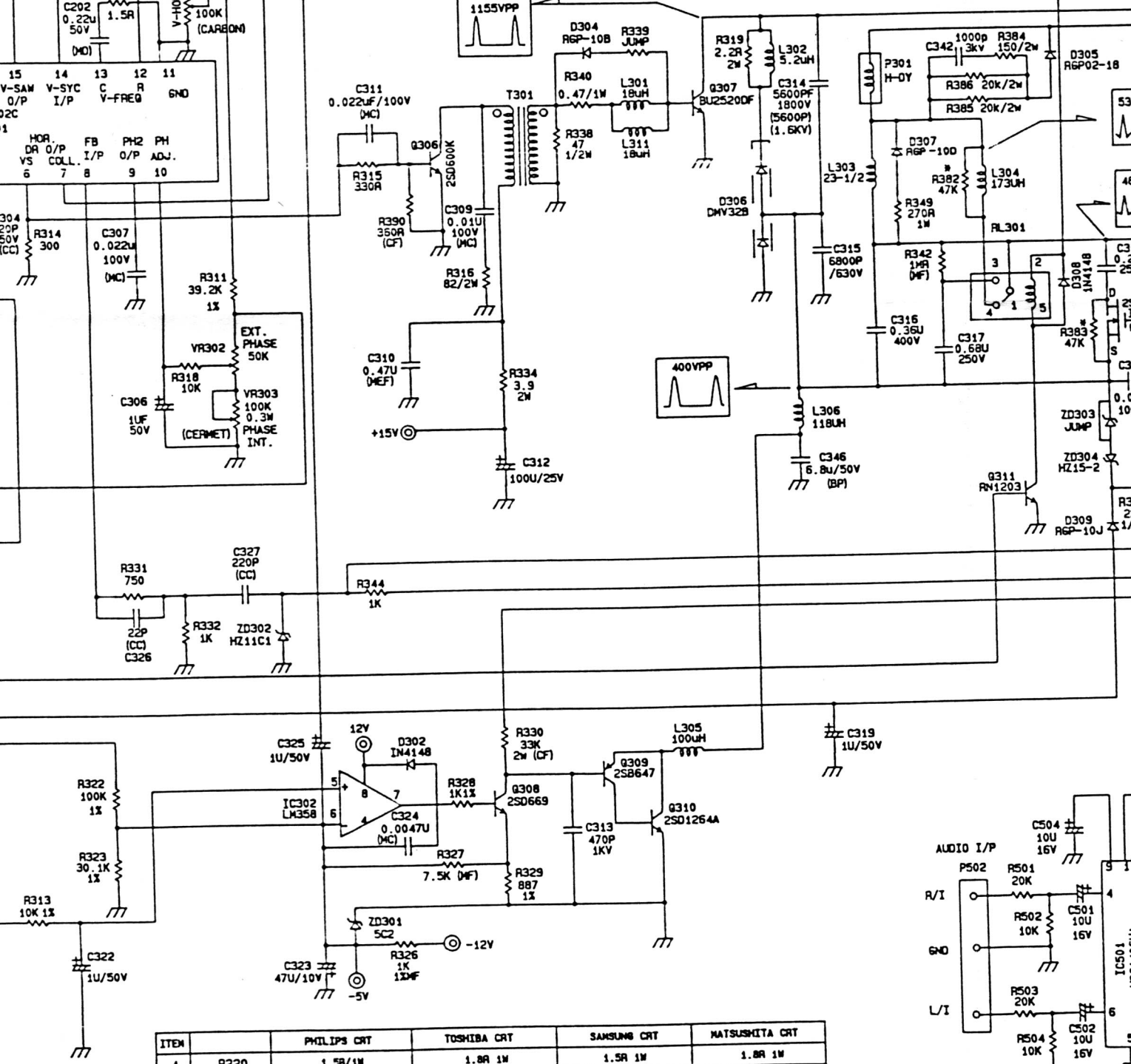


SIGNAL / H SYNC	F33K	F36K	F45K	F52K
HS < 33K	1	1	1	1
36K > HS 33K	0	1	1	1
45K > HS > 36K	0	0	1	1
52K > HS > 45K	0	0	0	1
60K > HS > 52K	0	0	0	0

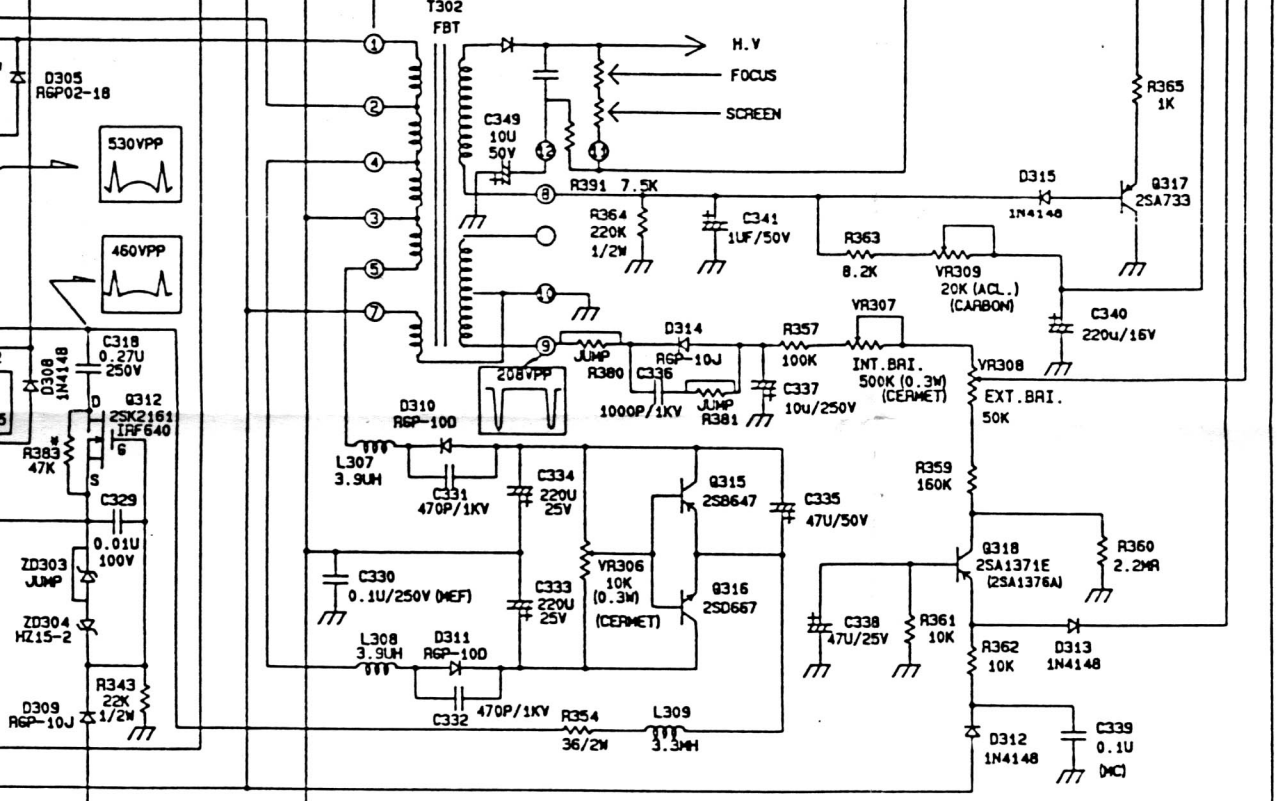
PARTS difference / CRT	R220	R215	R213	D205
PHILIPS	1.5R/1W	4.3K	NC	1N400
TOSHIBA	1.8R/1W	2K	47K	NC
SAMSUNG ONLY FOR PMS-5K4A/B PMS-5C4A/B	1.5R/1W	4.3K	NC	1N40

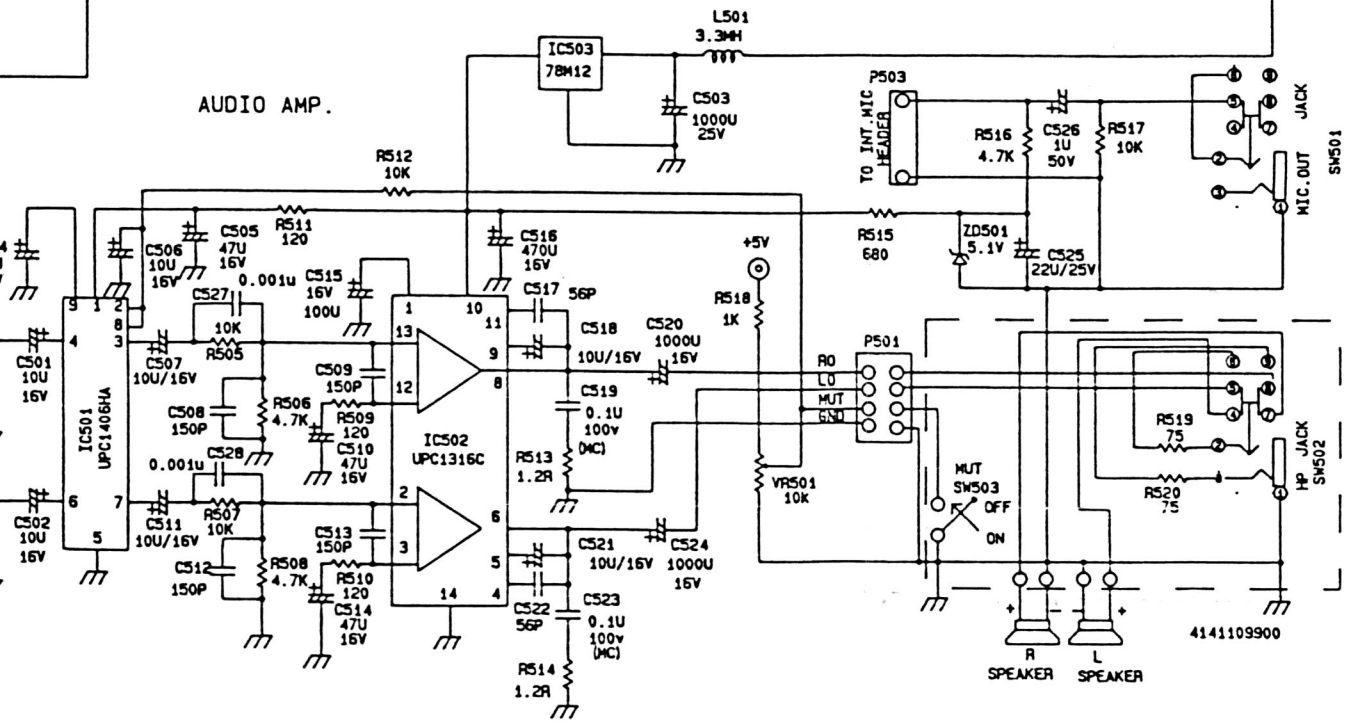


13	D205	R229	R230	R241	R226	R385	R386	R384	C342	D305	C317	C318	FBT
C	1N4001	60.4K	43R	33K	430R	20K/2W	20K/2W	150R/2W	1000P/3KV	RGP02-18	0.68U/250V	0.27U/250V	7050301500-000
7K	NC	NC	NC	51K	820R	20K/2W	20K/2W	150R/2W	1000P/3KV	RGP02-18	0.68U/250V	0.27U/250V	7050301500-000
C	1N4001	60.4K	43R	33K	430R	NC	NC	NC	NC	NC	0.62U/400V	0.22U/250V	7050301500-780 (SAMSUNG FBT)



ITEM		PHILIPS CRT	TOSHIBA CRT	SAMSUNG CRT	MATSUSHITA CRT
1	R220	1.5R/1W	1.8R 1W	1.5R 1W	1.8R 1W
2	R215	4.3K 1%	2K 1%	4.3K 1%	2.7K 1%
3	R213	(NC)	47K	(NC)	47K
4	D205	1N4001	(NC)	1N4001	(NC)
5	R229	60.4K 1%	(NC)	60.4K 1%	(NC)
6	R230	43R	(NC)	43R	(NC)
7	R241	33K	51K	33K	51K
8	R226	430R 1/2W	820R 1/2W	430R 1/2W	430R 1/2W
9	R63	1R 1/2W	0.47R 1/2W	JUMP WIRE	0.47R 1/2W
10	R385	20K 2W	20K 2W	(NC)	20K 2W
11	R386	20K 2W	20K 2W	(NC)	20K 2W
12	R384	150R 2W	150R 2W	(NC)	150R 2W
13	C342	1000P 3KV	1000P 3KV	(NC)	1000P 3KV
14	D305	RGP02-18	RGP02-18	(NC)	RGP02-18
15	T302	F.B.T	F.B.T	F.B.T (SAMSUNG)	F.B.T
16	C317	0.68uF 250V	0.68uF/250V	0.62uF 400V	0.68uF 250V
17	C318	0.27uF 250	0.27uF 250V	0.22uF 250V	0.27uF 250V
18	L303	COIL LINEARITY	COIL LINEARITY	COIL LINEARITY	COIL LINEARITY
19	Q206	(NC)	(NC)	RN1203	(NC)
20	R280	(NC)	(NC)	7.5K 1%	(NC)
21	J166	(NC)	(NC)	JUMP WIRE	(NC)
22	R130	22K 1%	22K 1%	22K 1%	23.7K 1%
23					





ViewSonic Corporation			
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DRAWER	SHEET	DRAWING NAME	FILENAME
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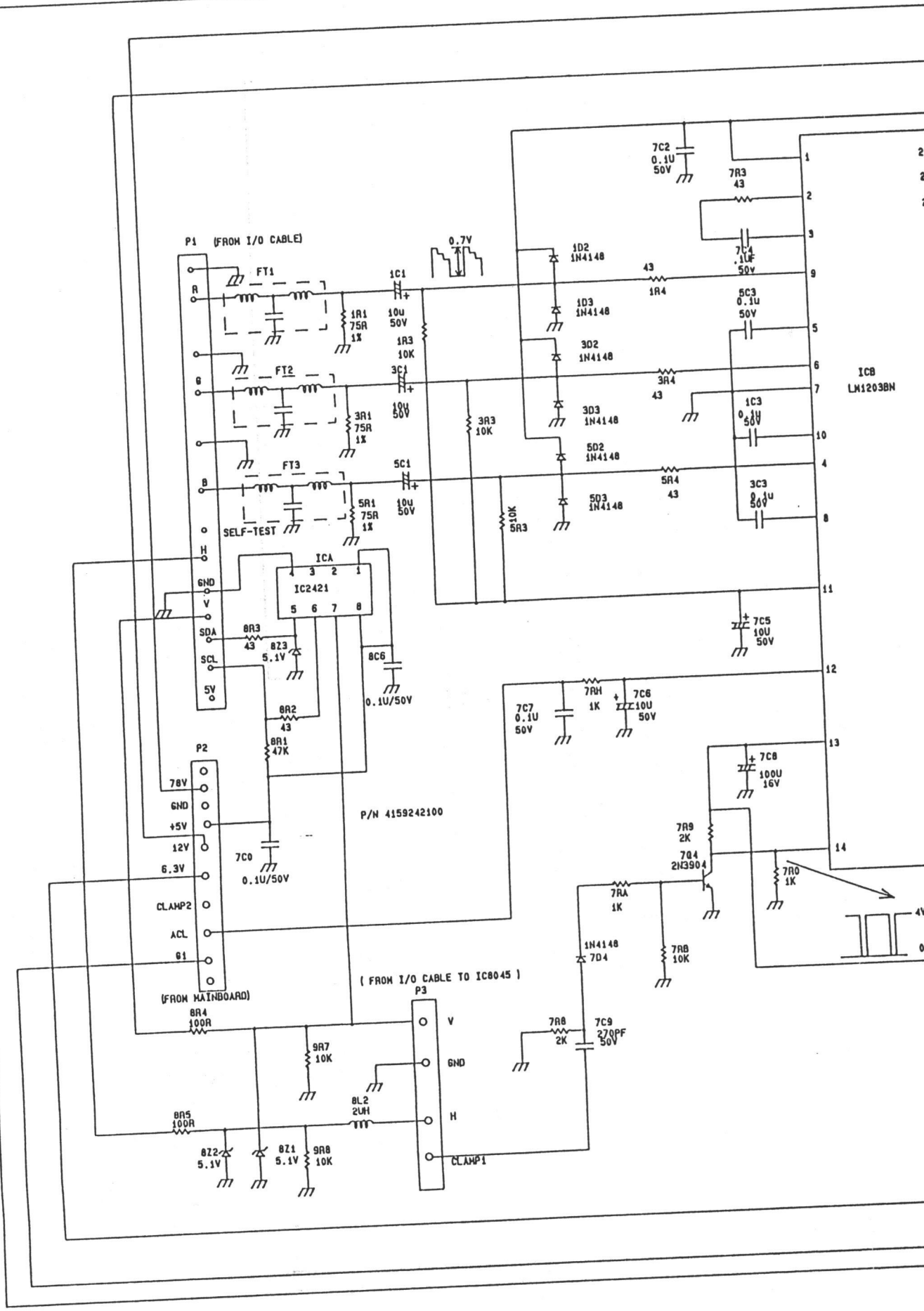
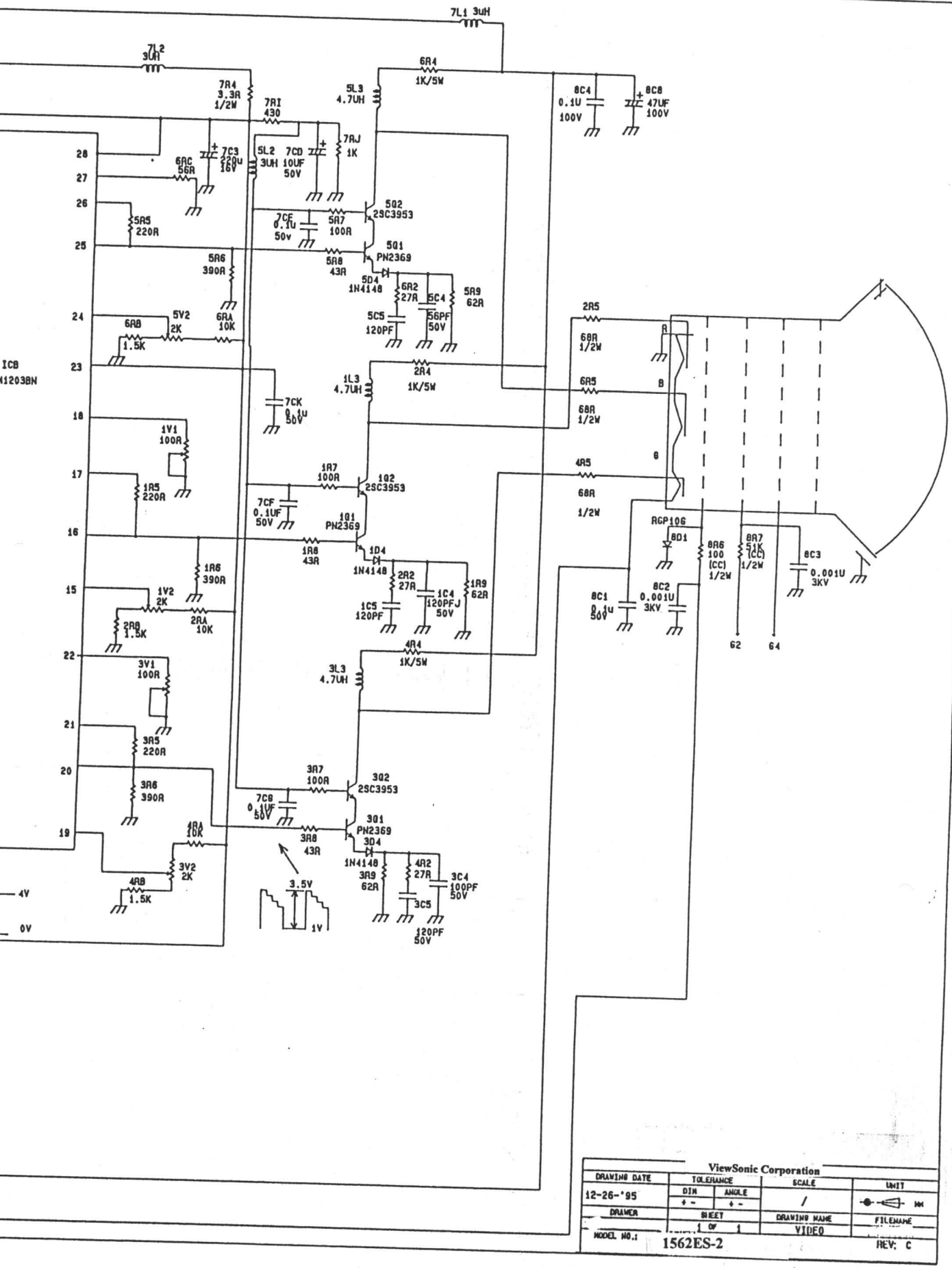
MODEL NO: 1562ES-2			

2 1

E	ECN/ECO NO.
'95	N-11299505PE





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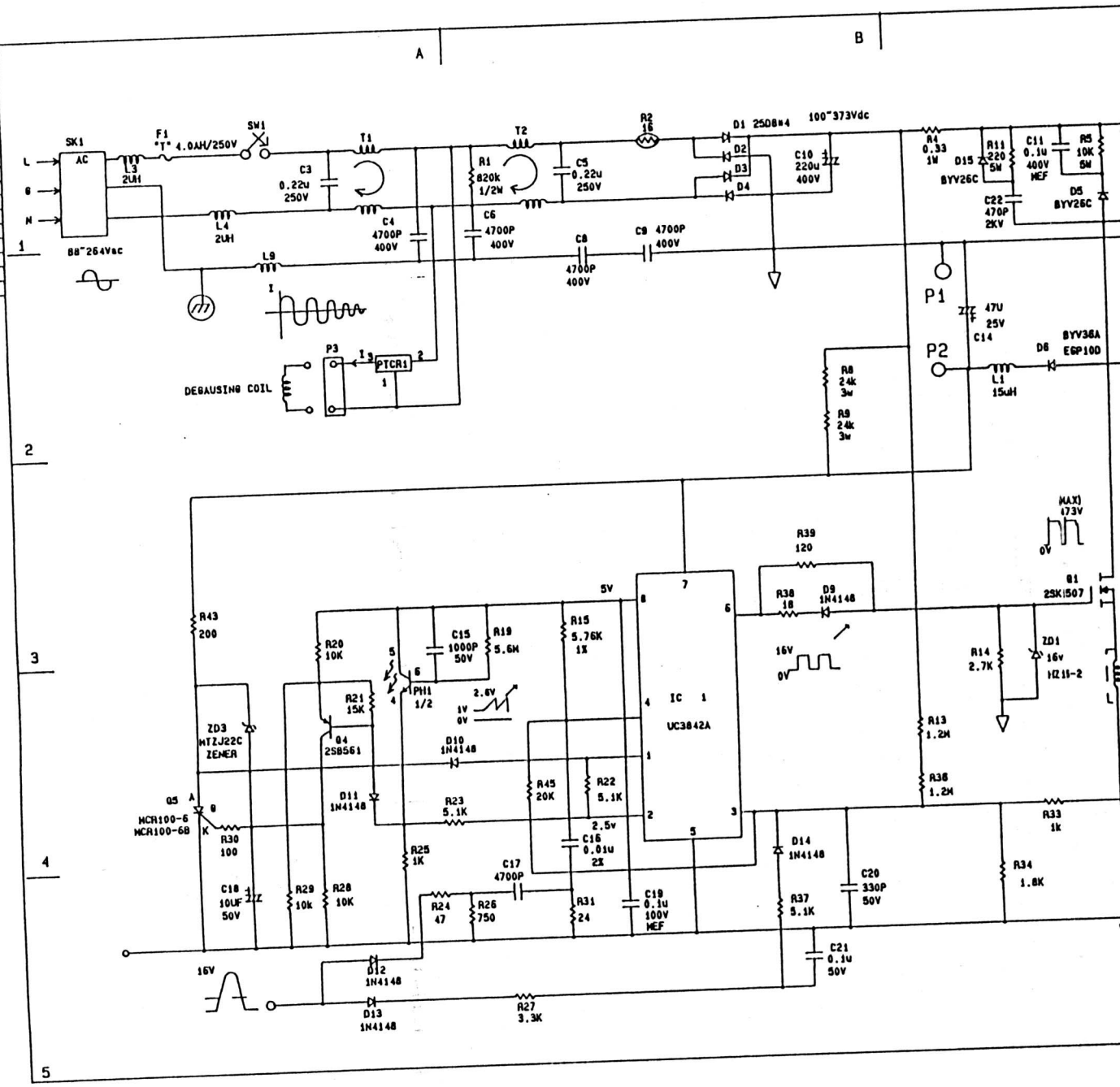
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